Substitute Form PTO-1449 (Notified)

U.S. Department of Commerce Patent and Trademark Office

Application No. Attorney's Docket No. 09010-007006 09/888,224 Applicant

Information Disclosure Statement by Applicant

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Lam, et al.	
Filing Date	Group Art Unit
June 22, 2001	1655

(37	CFR	§1.98	(b))

U.S. Patent Documents							
Examiner Iniţial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
Em)	AA	4,487,833	12/11/84	Donahoe			
	AB						
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	Foreign Patent Documents or Published Foreign Patent Applications							
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mitial	ID_	Number	Date	Patent Office	Class	Subclass	Yes	No
m	AL	WO 95/20047	7/27/95	WIPO				
1	AM	WO 97/25417	7/17/97	WIPO				
	AN	WO 98/24799	6/11/98	WIPO				
	AO	EP 0 687 732	12/20/95	EPO				
	AP	EP 0 606 008	7/13/94	EPO		REC	-1//	:n_
	AQ	JP 09 173077	7/8/97	Japan		KEU		
	AR	EP 0 648 846	4/19/95	ЕРО		OCT (8 2002	
	AS	DE 42 04 476	8/20/92	Germany	•	ECH CENT	R 1600	2900
	AT	JP 02 276578	11/13/90	Japan				
1	AU	WO 98/33895	8/6/98	WIPO				
V	AV	WO 97/20918	6/12/97	WIPO			,	

	Other Documents (include Author, Title, Date, and Place of Publication)							
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Lam, et al.

June 22, 2001

Group Art Unit 1655

(37 CFR §1.98(b))

	Other Do	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig.	Document
Initial	ID	Baba, T., et al., "IDENTIFICATION AND CHARACTERIZATION OF CLUSTERED GENES
(IN)	AW	FOR THERMOSTABLE XYLAN-DEGRADING ENZYMES, BETA-XYLOSIDASE AND XYLANASE, OF BACILLUS STEAROTHERMOPHILUS 21" Applied and Environmental Microbiology, U.S. Washington, D.C., vol. 60., no. 7, July 1, 1994 (pp. 2252-2258)
	AX	Dean, R.C., "MECHANISMS OF WOOD DIGESTION IN THE SHIPWORM BANKIA-GOULDI ENZYME DEGRADATION OF CELLULOSES HEMI CELLULOSES AND WOOD CELL WALLS", Database Accession No. PREV198069003408 XP002159358 (Abstract) and Biological Bulletin (Woods Hole), vol. 155, no. 2, 1978 (pp. 297-316)
	AY	Lao et al., "DNA SEQUENCES OF THREE BETA-1,4 ENDOGLUCANASE GENES FROM THERMOMONOSPORA FUSCA", XP002094152 Journal of Bacteriology, vol. 173, June 1, 1991 (pp. 3397-3407)
	AZ	Lin, E.S., et al., 'THERMOMONOSPORA FUSCA BETA-1,4-ENDOGLUCANASE PRECURSOR (E4) GENE, COMPLETE CDS", Accession L20093, XP002159359 July 8, 1993 (pp. 70-469)
	AAA	Jung et al., 'DNA SEQUENCES AND EXPRESSION IN STREPTOMYCES LIVIDANS OF AN EXOGLUCANASE GENE AND AN ENDOGLUCANASE GENE FROM THERMOMONOSPORA FUSCA, Accession P26221 XP002159360 May 1, 1992, pp. 6-864)
	ABB	Milward-Sadler Sarah J. et al., "NOVEL CELLULOSE-BINDING DOMAINS, NodB HOMOLOGUES AND CONSERVED MODULAR ARCHITECTURE IN XYLANASES FROM THE AEROBIC SOIL BACTERIA PSEUDOMONAS FLUORESCENS SUBSP. CELLULOSA AND CELLVIBRIO MIXTUS", Biochemical Journal vol. 312, no. 1, 1995 (pp. 39-48)
	ACC	Clarke, J.H., "P. FLUORESCENS SSP. CELLULOSA GENE FOR ENDO-BETA-1,4-XYLANASE", Accession Z48928, XP002159361, March 30, 1995 (pp. 982-1604)
	ADD	Millward-Sadler S.J. et al., "ENDO-BETA-1,4-XYLANASE PRECURSOR (EC 3.2.1.8) (ENDO-1,4-BETA XYLANASE)", Accession No. Q59765 XP002159362 November 1, 1996 (pp. 298-580)
	AEE	Hall J. et al., "THE NON-CATALYTIC CELLULOSE-BINDING DOMAIN OF A NOVEL CELLULASE FROM PSEUDOMONOAS FLUORESCENS SUBSP. CELLULOSE IS IMPORTANT FOR THE EFFICIENT HYDROLYSIS OF A VICEL", Biochemical Journal, G.B., Portland Press, London, Vol. 309, No. part 3, August 1, 1995 (pp. 749-756)
	AFF	Hall, J., et al., "P. FLUORESCENS CELE GEN", Accession No. X86798, XP002159363, May 11, 1995 (pp. 1159-1831)
	AGG	Hall, J., et al., "ENDO-1,4-BETA-GLUCANASE (EC 3.2.1.4) (CELLULASE) (ENDOGLUCANASE) (CARBOXYLMETHYL CELLULASE)", Accession No. Q59665, XP002159364 November 1, 1996 (pp. 6-565)
	АНН	Waterbury J.B. et al., "A CELLULOLYTIC NITROGEN FIXING BACTERIUM CULTURED FROM THE GLAND OF DESHAYES IN SHIPWORMS BIVALVIA TEREDINIDAE", Database Accession No. PREV198477059970, XP002159365 (Abstract) and Science (Washington, DC) Vol. 221, No. 4618, 1983 (pp. 1401-1403)
	AII	Watanabe et al., "PROLINE RESIDUES RESPONSIBLE FOR THERMOSTABILITY OCCUR WITH HIGH FREQUENCY IN THE LOOP REGIONS OF AN EXTREMELY THERMOSTABLE OLIGO-1 6-GLUCOSIDASE FROM BACILLUS-THERMOGLUCOSIDASIUS KP 1006", Journal of Biological Chemistry, vol. 266, no. 36, 1991 (pp. 24287-24294)

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Examiner Signature	Date Considered 2/20/03
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Application No. Attorney's Docket No. 09/888,224 09010-007006 Applicant Lam, et al. Filing Date **Group Art Unit**

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June 22, 2001

Sheet 3 of

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

(37 CFR §1.98(b))

Examiner	Desig.					
Initial	ID Document					
m	AJJ	King Michael et al., "THERMOSTABLE ALPHA-GALACTOSIDASE FROM THERMOTOGA NEAPOLITANA: CLONING SEQUENCING AND EXPRESSION", FEMS Microbiology Letters, Vol. 163, No. 1, June 1, 1998 (pp. 37-42)				
1	AKK	King, M.R. et al., "ALPHA-1,6-GALACTOSIDASE (EC 3.2.1.22)", Accession No. Q9R7H1, XP002159366 (May 1, 2000) (pp. 68-618)				
	ALL	King M.R. et al., "THERMOTOGA NEAPOLITANA ALPHA-1,6-GALACTOSIDASE (ag1A) GENE, COMPLETE CDS", Accession No. AF011400, XP002159367, June 19, 1998 (pp. 1-1716)				
	AMM	Moore, J.B., et al., "THERMOTOGA MARITIMA BETA-GALACTOSIDASE (LACZ) GENE, COMPLETE CDS, AND ATP-DEPENDENT OLIGOPEPTIDE TRANSPORT PROTEIN D GENE, PARTIAL CDS", Accession No. UO8186, XP002159368, April 18, 1994 (pp. 2-962)				
	ANN	Parker, et al., "THERMOTOGA NEOPOLITANA manB GENE", Accession No. Y17981, XP002159369, September 30, 1999				
	AOO	Hayden et al., "SEC-INDEPENDENT PROTEIN TRANSLOCASE PROTEIN TATE", Accession No. P25895, XP002159370, May 1, 1992 (pp. 5-59)				
	APP	Voorhorst Wilfried G.B. et al., "CHARACTERIZATION OF THE CELB GENE CODING FOR BETA-GLUCOSIDASE FROM THE HYPERHTERMOPHILIC ARCHAEON PYROCOCCUS FURIOSUS AND ITS EXPRESSION AND SITE-DIRECTED MUTATION IN ESCHERICHIA COLI", Journal of Bacteriology, Vol. 177, No. 24, 1994 (pp. 7105-7111)				
	AQQ	Voorhorst W.G. et al., "PYROCOCCUS FURIOSUS BETA-GLUCOSIDASE (celB) GENE, COMPLETE CDS; ADH-1AM OPERON, COMPLETE SEQUENCE; BIOTIN LIGASE BIRA HOMOLOG (BIRA) GENE, COMPLETE CDS; AND –POSPHOGLYCERATE KINASE (PGK) GENE, PARTIAL CDS", Accession No. AFO13169, XP002159371 July 7, 1998 (pp. 1624-729)				
	ARR	Voorhorst, et al., "BETA-GLUCOSIDASE", Accession No. Q51723, XP002159372, November 1, 1996 (November 1, 1996 (pp. 1-478)				
	ASS	Tachibana Yoshihisa et al., "CLONING AND EXPRESSION OF THE ALPHA-AMYLASE GENIFROM THE HYPERTHERMOPHILIC ARCHAEON PYROCOCCUS SP. KOD1, AND CHARACTERIZATION OF THE ENZYME", Journal of Fermentation and Bioengineering, Vol. 82, No. 3, 1996 (pp. 224-232)				
	ATT	Nelson K.E. et al., "THERMOTOGA MARITIMA SECTION 125 OF 136 OF THE COMPLETE GENOME", Accession No. AE001813, XP002159373, June 4, 1999				
	AUU	Wang W., et al., "NUCLEOTIDE SEQUENCE OF THE cela GENE ENCODING A CELLODESCTRINASE OF RUMINOCOCCUS FLAVEFACIENS FORMAL DRAWINGS-1", Accession No. P16169, XP002159374, April 1, 1990 (pp. 17-287)				
	AVV	Nelson K.E., et al., "THERMOTOGA MARITIMA SECTION 134 OF 136 OF THE COMPLE GENOME", Accession No. AE001822, XP002159375, June 4, 1999				
	AWW	Yoshihisa et al., "ALPHA-MANNOSIDASE (EC 3.2.1.24) (ALPHA-D MANNOSIDE MANNOHYDROLASE), Accession No. P22855, XP-002159376, August 1, 1991 (pp. 9-946)				
	AXX	Nelson K.E. et al., "THERMOTOGA MARITIMA SECTION 6 OF 136 OF THE COMPLETE GENOME", Accession No. AE001694, XP-002159377, June 4, 1999 (pp. 4969-8305)				
	AYY	Yernool D.A. et al., "THERMOTOGA NEAPOLITANA MANNOSIDASE (manA), XYLOSIDASE (xloaA), AND ACETYLE XYLAN ESTERASE (axeA) GENES, COMPLETE CDS", Accession No. U58632, XP002159378, June 21, 1996				
	AZZ	Breves et al., "T-BROCKII CGLF, CGLG, XGLS, AND CTLT GENES", Accession No. Z56279, XP002159379, October 13, 1995 Date Considered				

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with

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	Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner	Desig.	·				
nitial	ID	Document				
W	AAAA	Gilbert H.J., "P-FLUORESCENS celD GENE FOR 1,4-B-D-GLUCAN GLUCOHYDROLASE",				
		Accession No. X65527, XP002159380, May 5, 1992				
	ABBB	Svitil A.L, et al., "VIBRIO HARVEYI CHITINASE A (CHIA) GENE, COMPLETE CDS", Accession No. U81496, XP002159381, January 5, 1997				
	ACCC	Ramesh et al., "CELLULYTIC ACTIVITY OF 1-13 LUMINOUS BACTERIA", Mircen Journal of Applied Microbiology and Biotechnology, Vol 4, No. 2, 1988 (pp, 227-230)				
	ADDD	Dakhova O.N. et al., "CLONING AND EXPRESSION IN ESCHERICHIA COLI OF THERMOTOGA NEAPOLITANA GENES CLONING FOR ENZYMES OF CARBOHYDRATE SUBSTRATE DEGRADATION", Biochemical and Biophysical Research Communications, Vol. 194, No. 3, August 16, 1993, pp. 1359-1364				
	AEEE	Creuzet et al., "Biochemie 65:149-156				
	AFFF	Huber, et al., "THERMOTOGA MARTIMA SP. NOV. REPRESENTS A NEW GENUS OF UNIQUE EXTREMELY THERMOPHILIC EUBACTERIA GROWING UP TO 90°C", Archives of Microbiology, 1986 144:324-333				
	AGGG	Coughlan, Michael P., "THE PROPERTIES OF FUNGAL AND BACTERIAL CELLULASES WITH COMMENT ON THEIR PRODUCTION AND APPLICATION", Biotechnology and Genetic Engineering Reviews, Vol, 3, September 1985, (pp. 39-109)				

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Examiner Signature)	Date Considered	100	
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